

Morbidity and Mortality



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REPORT

For
Week Ending
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U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE
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EPIDEMIOLOGIC NOTES AND REPORTS INFLUENZA — Hawaii

Sporadic cases of influenza-like disease associated with an increase in influenza isolates have been reported on the island of Oahu. All influenza isolates have been Type A. In addition, an outbreak of influenza-like illness occurred in mid-November on the island of Molokai. Approximately 20% of persons visiting the island clinic reported influenza-like disease.

Within the continental United States isolated cases of influenza have been reported during the month of November from California, District of Columbia, Florida, Georgia, North Carolina, Utah, and Virginia. All seroconversions and viral isolates have been Type A influenza virus.

(Reported by Paul G. Stevens, MD, M. Tottori, MD, Robert

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TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	48th WEEK ENDING		MEDIAN 1969-1973	CUMULATIVE, FIRST 48 WEEKS		
	November 30, 1974	December 1, 1973		1974	1973	MEDIAN 1969-1973
Aseptic meningitis	45	60	91	2,961	4,441	4,441
Brucellosis	4	1	1	168	167	174
Chickenpox	1,816	1,345	—	111,349	153,624	—
Diphtheria	5	5	5	225	179	179
Encephalitis:						
Primary: Arthropod-borne and unspecified	14	17	31	991	1,434	1,427
Post-Infectious	2	4	4	237	259	280
Hepatitis, Viral:						
Type B	159	188	151	9,153	7,501	7,501
Type A	625	—	—	38,557	—	—
Type unspecified	103	1,080	1,080	7,623	47,821	50,537
Malaria	5	2	26	244	230	2,738
Measles (rubeola)	143	249	536	21,274	25,781	29,705
Meningococcal infections, total	20	21	32	1,250	1,254	2,056
Civilian	19	21	26	1,221	1,228	1,839
Military	1	—	3	29	26	217
Mumps	897	999	1,753	51,688	63,879	80,558
Pertussis	35	—	—	1,607	—	—
Rubella (German measles)	108	115	364	11,370	27,306	41,976
Tetanus	—	1	3	88	83	110
Tuberculosis, new active	517	589	—	28,089	28,742	—
Tularemia	1	—	3	133	149	144
Typhoid fever	6	3	9	395	611	353
Typhus, tick-borne (Rky. Mt. spotted fever)	3	4	2	752	626	447
Venereal Diseases:						
Gonorrhea	17,123	17,528	—	847,084	786,736	—
Syphilis, primary and secondary	424	498	—	23,134	22,982	—
Rabies in animals	35	57	57	2,703	3,139	3,139

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	2	Poliomyelitis, total:	5
Botulism:	16	Paralytic:	5
Congenital rubella syndrome:	45	Psittacosis:	151
Leprosy: Calif. 2, V.I. 1.	89	Rabies in man:	—
Leptospirosis: Mo. 2	45	Trichinosis: Tex. 1.	94
Plague:	6	Typhus, murine:	24

INFLUENZA - Continued

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State Laboratories, Taira Fukushima, MD, State Epidemiologist, Utah State Division of Health; Frank W. Lambert, PhD, Director of Microbiology, Division of Consolidated Laboratories, Robert S. Jackson, MD, State Epidemiologist, State Department of Health, Virginia; Influenza Unit, Respiratory and Special Pathogens Activity, Viral Diseases Division, Bureau of Epidemiology, CDC.)

LEAD ABSORPTION - Georgia

In October 1974, 3 instructors at the DeKalb County, Georgia, indoor police firing range were found by means of a routine screening program to have blood lead levels of 139, 128, and 109 $\mu\text{g}/100\text{ml}$ (Table 1). A blood lead level of 80 $\mu\text{g}/100\text{ml}$ or more in an adult is considered by the National Institute of Occupational Safety and Health (NIOSH) to represent "unacceptable absorption of lead posing a risk of lead poisoning (1)."

Two of the instructors (cases 1 and 3) had reported occasional abdominal pain, and 1 exhibited a lead line on the lingual surface of his lower gum. No additional signs or symptoms of abnormal lead absorption were noted. Abnormalities of both motor and sensory nerve conduction were demonstrated in case 2; nerve conduction data are pending for case 1. Electrocardiogram, creatinine clearance, blood glucose, and liver function studies were normal in all 3, as were psychological profiles.

Repeat testing of the same individuals on November 7, 3½ weeks after the temporary closing of the range, showed that levels had fallen to 80, 53, and 56 $\mu\text{g}/100\text{ml}$. Free erythrocyte protoporphyrin (FEP) levels on that date were 527, 466, and 522 $\mu\text{g}/100\text{ml}$ RBC (normal ≤ 50 $\mu\text{g}/100\text{ml}$ RBC). Screening of blood levels in 34 additional policemen, 15 weekly shooters and 19 less frequent shooters, showed all values to be below 80 $\mu\text{g}/100\text{ml}$ (mean 30 $\mu\text{g}/100\text{ml}$).

Epidemiologic investigation revealed the most likely sources of the absorbed lead to have been either lead dust produced during revolver firing or lead vapor produced during the melting down of scrap lead to make lead slugs. Each instructor fired 200 or more rounds of lead ammunition per working day (.38 special, 148-grain wad-cutter slug with a 2.5-grain powder lead). Depending upon the alignment between the gun cylinder and barrel some shearing off and scattering of tiny lead fragments could have occurred with each shot as the slug crossed the air gap between cylinder and barrel (2,3). Furthermore, studies measuring the airborne lead levels at the firing line showed an increase from 0.00mg/m³ before firing to 3.13 mg/m³ after 16 minutes of firing. These data suggest that ventilation at the range was inadequate. NIOSH recommends that occupational exposure to inorganic lead not exceed a concentration of 0.15mg/m³, determined as a time-weighted average for an 8-hour workday (1).

The melting down of scrap lead to make slugs was practiced on the premises of the DeKalb County range until early 1972. This procedure required the almost continuous operation of an electric melting pot at 900°-950°F and produced lead vapor. Case 1 had molded bullets in this fashion for 13 years, and cases 2 and 3 for 3 years.

(Reported by Alexander S. McKinney, MD, Linton C. Hopkins, MD, Department of Medicine (Neurology), Emory University School of Medicine; William A. Price, Safety Officer, DeKalb County Merit System; F. D. Hand, Chief, DeKalb County Police Department; Henry G. Palmer, MD, Assistant

Table 1
Lead Absorption Case Histories and Laboratory Data for
Firing Range Personnel
DeKalb County, Georgia, October-November 1974

	Case 1	Case 2	Case 3
Age/Sex	44/M	40/F	34/F
Symptoms and Signs	Abdominal pain; lead line	None	Abdominal pain
Years as Instructor	15	5	5
Blood Lead ($\mu\text{g}/100\text{ml}$)			
Oct	139	128	109
Nov	80	53	56
FEP* ($\mu\text{g}/100\text{ml}$ RBC)	527	466	522
Peripheral nerve conduction	Results pending	Motor and Sensory Abnormalities	Normal

*Free erythrocyte protoporphyrin

Director, Thomas O. Vinson, MD, Director, DeKalb County Health Department; Thomas McKinley, Assistant Director, John McCroan, PhD, Director, Epidemiology Section, Georgia Department of Human Resources; and within CDC: the National Institute for Occupational Safety and Health; Toxicology Branch, Clinical Chemistry Division, Bureau of Laboratories; Environmental Hazards Activity, Cancer and Birth Defects Division, Microbiologic Control Branch, Bacterial Diseases Division, Bureau of Epidemiology.)

Editorial Note

This episode illustrates the potential health hazard posed by airborne lead in indoor firing ranges. Excessive lead absorption among firing range instructors has been noted several times previously (2, 3); in each instance range ventilation was shown to have been inadequate. It is important that blood lead levels and air lead levels in firing ranges be monitored in accordance with NIOSH standards; a range should be closed and the ventilation system corrected if blood lead levels ≥ 80 $\mu\text{g}/100\text{ml}$ or airborne lead levels $\geq 0.15\text{mg}/\text{m}^3$ are discovered during firing or bullet molding operations (1).

Evaluation of existing ventilation at the DeKalb County firing range indicated the need to increase air inflow approximately 6-fold to achieve reduction of airborne lead levels to meet NIOSH standards. Repair work to correct the range ventilation system is currently underway.

References

1. National Institute for Occupational Safety and Health: Criteria for a Recommended Standard—Occupational Exposure to Inorganic Lead. Washington, GPO, 1972
2. Design considerations for indoor firing ranges. Michigan's Occupational Health 7:1-3, 1962
3. National Institute for Occupational Safety and Health: Lead Exposures at an Indoor Firing Range. 30 Mar 1973 (Unpublished report from Industrial Hygiene Services Branch and Medical Services Branch)

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING NOVEMBER 30, 1974 AND DECEMBER 1, 1973 (48th WEEK)

AREA	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	CHICKEN- POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS, VIRAL			MALARIA	
						Primary: Arthropod- borne and Unspecified		Post In- fectious	Type B	Type A	Type Unspecified		
	1974	1974	1974	1974	Cum. 1974	1974	1973	1974	1974	1974	1974	1974	Cum. 1974
UNITED STATES	45	4	1,816	5	225	14	17	2	159	625	103	5	244
NEW ENGLAND	-	1	156	-	-	-	1	-	3	26	11	-	9
Maine *	-	-	9	-	-	-	-	-	-	1	-	-	-
New Hampshire*	-	-	4	-	-	-	-	-	-	4	-	-	1
Vermont	-	-	-	-	-	-	-	-	-	2	-	-	-
Massachusetts	-	1	99	-	-	-	1	-	1	5	11	-	2
Rhode Island	-	-	10	-	-	-	-	-	-	6	-	-	3
Connecticut	-	-	34	-	-	-	-	-	2	8	-	-	3
MIDDLE ATLANTIC	3	-	106	-	1	1	6	-	23	64	9	2	49
Upstate New York	1	-	55	-	-	-	4	-	3	24	1	-	17
New York City	2	-	49	-	-	-	-	-	3	20	-	1	18
New Jersey	-	-	NN	-	-	-	-	-	10	12	4	1	8
Pennsylvania	-	-	2	-	1	1	2	-	7	8	4	-	6
EAST NORTH CENTRAL	2	-	611	-	2	6	4	1	33	131	11	1	20
Ohio *	-	-	50	-	1	1	1	-	12	18	-	-	6
Indiana	-	-	49	-	-	-	-	-	2	5	-	-	-
Illinois	-	-	-	-	1	3	-	-	4	32	7	-	2
Michigan	2	-	309	-	-	2	3	1	13	58	4	1	11
Wisconsin	-	-	203	-	-	-	-	-	2	18	-	-	1
WEST NORTH CENTRAL	1	1	313	-	-	1	-	-	4	33	10	-	7
Minnesota	-	-	28	-	-	-	-	-	-	2	-	-	2
Iowa	1	-	213	-	-	-	-	-	1	3	-	-	3
Missouri *	-	1	42	-	-	1	-	-	1	15	2	-	1
North Dakota	-	-	3	-	-	-	-	-	-	3	-	-	-
South Dakota	-	-	-	-	-	-	-	-	-	-	-	-	1
Nebraska	-	-	11	-	-	-	-	-	2	-	-	-	-
Kansas	-	-	16	-	-	-	-	-	-	10	8	-	-
SOUTH ATLANTIC	10	-	118	-	1	-	1	1	34	104	12	-	35
Delaware	-	-	-	-	-	-	-	-	-	1	-	-	1
Maryland	1	-	-	-	-	-	-	-	3	7	2	-	6
District of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	5
Virginia *	1	-	2	-	-	-	-	-	3	7	-	-	7
West Virginia	-	-	105	-	-	-	-	-	-	1	-	-	2
North Carolina	2	-	NN	-	1	-	-	-	1	20	-	-	4
South Carolina	3	-	11	-	-	-	-	1	1	8	3	-	1
Georgia	-	-	-	-	-	-	-	-	-	20	-	-	1
Florida	3	-	-	-	-	-	1	-	26	40	7	-	8
EAST SOUTH CENTRAL	14	-	63	-	-	2	4	-	6	55	1	1	10
Kentucky	5	-	47	-	-	-	-	-	1	21	1	1	6
Tennessee	5	-	NN	-	-	1	-	-	5	24	-	-	1
Alabama	1	-	13	-	-	-	-	-	-	2	-	-	-
Mississippi	3	-	3	-	-	1	4	-	-	8	-	-	3
WEST SOUTH CENTRAL	5	1	182	-	9	-	-	-	8	69	7	-	17
Arkansas	-	-	-	-	-	-	-	-	3	6	1	-	1
Louisiana	-	-	NN	-	-	-	-	-	-	8	2	-	1
Oklahoma	-	1	8	-	-	-	-	-	3	13	-	-	6
Texas	5	-	174	-	9	-	-	-	2	42	4	-	9
MOUNTAIN	-	-	84	1	36	-	-	-	5	28	18	-	12
Montana	-	-	14	-	-	-	-	-	-	2	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming	-	-	-	-	-	-	-	-	-	2	-	-	-
Colorado	-	-	2	-	3	-	-	-	3	6	7	-	5
New Mexico	-	-	4	1	14	-	-	-	1	8	4	-	3
Arizona *	-	-	-	-	19	-	-	-	1	5	2	-	2
Utah	-	-	64	-	-	-	-	-	-	2	5	-	1
Nevada	-	-	-	-	-	-	-	-	-	3	-	-	1
PACIFIC	10	1	183	4	176	4	1	-	43	115	24	1	85
Washington	4	-	94	4	165	1	-	-	11	17	15	-	-
Oregon	-	-	2	-	-	1	-	-	1	21	-	-	2
California *	6	1	-	-	7	2	1	-	30	75	9	1	79
Alaska	-	-	79	-	4	-	-	-	1	2	-	-	-
Hawaii	-	-	8	-	-	-	-	-	-	-	-	-	4
Guam	-	-	-	-	-	-	-	-	-	-	-	-	2
Puerto Rico	-	-	5	-	1	-	-	-	-	-	12	-	1
Virgin Islands	-	-	-	-	-	-	-	-	-	-	1	-	3

*Delayed reports: Chickenpox: Me. 41, N.H. 2, Calif. 18
 Encephalitis, primary: Mo. delete 1
 Hepatitis B: N.H. 1, Ohio 1, Mo. 1, Ariz. (1973) 1

Hepatitis A: Ohio delete 1, Mo. delete 1,
 Ariz. (1973) 2, delete 3
 Hepatitis unspecified: Va. delete 3

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING NOVEMBER 30, 1974 AND DECEMBER 1, 1973 (48th WEEK) — Continued

AREA	MEASLES (Rubella)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1974	Cumulative		1974	Cumulative		1974	Cum. 1974	1974	1974	Cum. 1974	Cum. 1974
		1974	1973		1974	1973						
UNITED STATES	143	21,274	25,781	20	1,250	1,254	897	51,688	35	108	11,370	88
NEW ENGLAND	1	959	7,579	1	72	51	49	6,415	—	8	1,185	1
Maine *	—	45	70	—	4	1	—	861	—	3	291	—
New Hampshire *	—	211	995	—	10	7	—	300	—	1	23	1
Vermont	—	56	120	—	12	3	—	17	—	—	41	—
Massachusetts	—	404	3,948	—	17	14	6	1,074	—	1	366	—
Rhode Island	—	61	632	—	10	3	25	2,587	—	—	20	—
Connecticut	1	182	1,814	1	19	23	18	1,576	—	3	444	—
MIDDLE ATLANTIC	7	8,255	2,738	5	187	173	23	3,944	2	3	1,152	7
Upstate New York	1	972	820	1	67	62	6	974	1	—	266	2
New York City	5	628	937	1	41	36	6	749	1	1	167	1
New Jersey	1	5,685	583	2	53	41	8	718	—	1	463	2
Pennsylvania	—	970	398	1	26	34	3	1,503	—	1	256	2
EAST NORTH CENTRAL	57	8,303	8,919	4	160	172	371	15,201	14	44	3,739	10
Ohio	4	3,064	308	1	66	74	31	3,377	—	4	525	2
Indiana	—	273	689	2	17	6	40	1,229	—	5	631	—
Illinois	18	2,124	2,130	—	11	28	34	1,396	11	2	613	3
Michigan	23	2,220	4,488	1	48	48	119	6,274	2	24	1,345	4
Wisconsin	12	622	1,304	—	18	16	147	2,925	1	9	625	1
WEST NORTH CENTRAL	8	720	462	—	96	92	61	3,209	1	7	240	13
Minnesota	—	85	24	—	31	12	2	51	—	2	15	2
Iowa	—	134	281	—	15	22	8	1,886	1	—	15	1
Missouri *	5	269	55	—	27	34	19	441	—	2	46	4
North Dakota	3	37	67	—	3	3	6	91	—	—	18	3
South Dakota	—	27	2	—	3	5	1	3	—	—	26	—
Nebraska	—	3	6	—	3	7	1	89	—	—	6	—
Kansas	—	165	27	—	14	9	24	648	—	3	114	3
SOUTH ATLANTIC	3	593	1,308	1	243	212	52	6,134	1	14	1,322	24
Delaware	1	16	10	—	5	3	—	102	—	—	30	—
Maryland	—	24	14	1	25	29	1	135	—	—	5	1
District of Columbia	—	3	8	—	1	4	—	50	—	—	4	—
Virginia	—	37	426	—	40	43	3	698	—	1	54	3
West Virginia	1	223	229	—	8	6	28	3,252	—	3	309	1
North Carolina	—	5	4	—	48	42	NN	NN	1	1	56	4
South Carolina	—	57	76	—	21	13	1	138	—	9	672	4
Georgia	—	4	153	—	8	23	—	1	—	—	3	1
Florida	1	224	388	—	87	49	19	1,758	—	—	189	10
EAST SOUTH CENTRAL	2	285	630	4	123	117	122	6,425	13	8	651	6
Kentucky	2	198	394	1	47	42	83	2,774	13	5	223	—
Tennessee	—	56	165	1	53	44	28	2,687	—	3	346	2
Alabama	—	18	13	2	14	18	10	575	—	—	63	1
Mississippi	—	13	58	—	9	13	1	389	—	—	19	3
WEST SOUTH CENTRAL	10	245	743	1	202	198	95	3,857	1	4	514	11
Arkansas	—	7	72	—	14	14	1	145	—	—	26	—
Louisiana *	—	13	87	—	48	48	26	282	—	—	130	4
Oklahoma	—	29	66	—	21	32	—	402	1	—	58	3
Texas	10	196	518	1	119	104	68	3,028	—	4	300	4
MOUNTAIN	1	795	990	—	40	37	5	1,194	1	2	435	1
Montana	—	373	260	—	1	9	—	179	—	—	68	—
Idaho	1	53	256	—	2	4	—	158	—	—	16	—
Wyoming	—	1	81	—	3	1	—	10	—	—	—	—
Colorado	—	71	109	—	9	11	1	584	—	—	165	—
New Mexico	—	62	133	—	3	3	4	183	1	—	125	—
Arizona	—	20	21	—	9	5	—	—	—	—	2	1
Utah *	—	15	129	—	9	2	—	67	—	2	26	—
Nevada	—	200	1	—	4	2	—	13	—	—	33	—
PACIFIC	54	1,119	2,412	4	127	202	119	5,309	2	18	2,132	15
Washington	2	76	1,080	1	17	21	78	1,897	—	7	421	1
Oregon	—	—	460	2	16	17	7	828	—	—	233	2
California	52	977	787	1	87	156	33	2,359	2	11	1,461	11
Alaska	—	—	65	—	4	8	—	150	—	—	—	—
Hawaii	—	66	20	—	3	—	1	75	—	—	17	1
Guam	—	20	52	—	2	1	—	373	—	—	7	—
Puerto Rico	1	665	1,982	—	6	8	—	1,178	—	—	33	5
Virgin Islands	—	30	7	—	—	—	1	36	—	—	—	1

*Delayed reports: Measles: Mo. delete 1, Utah delete 1
Meningococcal infections: Mo. 1, La. delete 5

Mumps: Me. 20, N.H. 1
Rubella: Me. 2

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING NOVEMBER 30, 1974 AND DECEMBER 1, 1973 (48th WEEK) — Continued

AREA	TUBERCULOSIS (New Active)		TULA- REMIA	TYPHOID FEVER		TYPHUS-FEVER TICK-BORNE (Rky. Mt. spotted fever)		VENEREAL DISEASES						RABIES IN ANIMALS
	1974	Cum. 1974	Cum. 1974	1974	Cum. 1974	1974	Cum. 1974	GONORRHEA		SYPHILIS (Pri. & Sec.)		Cum. 1974		
								1974	Cumulative	1974	Cumulative			
								1974	1973	1974	1973			
UNITED STATES	517	28,089	133	6	395	3	752	17,123	847,084	786,736	424	23,134	22,982	2,703
NEW ENGLAND	10	1,119	—	—	21	—	8	353	22,646	19,396	5	467	598	25
Maine	—	86	—	—	1	—	—	21	1,902	1,260	—	40	25	3
New Hampshire	3	28	—	—	1	—	—	37	778	753	—	13	11	3
Vermont	—	23	—	—	1	—	—	11	601	341	—	2	21	1
Massachusetts	4	611	—	—	14	—	6	114	10,305	8,057	3	194	269	4
Rhode Island	—	97	—	—	2	—	2	45	2,030	1,979	1	19	15	4
Connecticut	3	274	—	—	2	—	—	125	7,030	7,006	1	199	257	10
MIDDLE ATLANTIC	125	5,133	2	—	66	—	67	1,956	101,344	108,736	73	4,872	5,121	80
Upstate New York *	38	804	2	—	14	—	28	335	19,146	18,906	18	466	376	37
New York City	38	1,960	—	—	33	—	3	927	43,858	48,775	29	2,780	3,054	—
New Jersey	24	926	—	—	12	—	4	185	13,786	16,111	15	791	923	25
Pennsylvania	25	1,443	—	—	7	—	32	509	24,554	24,944	11	835	768	18
EAST NORTH CENTRAL	64	3,857	7	2	41	—	26	3,522	134,631	120,744	42	1,983	2,114	191
Ohio	11	1,011	—	—	6	—	17	839	35,679	29,221	3	303	247	26
Indiana	—	553	—	—	5	—	1	227	12,777	11,138	4	171	268	14
Illinois	26	1,129	4	2	17	—	6	1,377	43,350	42,009	26	1,028	1,088	45
Michigan	26	1,051	—	—	11	—	2	763	29,735	28,434	8	385	440	5
Wisconsin	1	113	3	—	2	—	—	316	13,090	9,942	1	96	71	101
WEST NORTH CENTRAL	12	1,083	20	—	12	—	17	1,275	44,220	39,810	15	590	363	712
Minnesota	5	172	—	—	4	—	—	230	9,665	7,942	4	78	95	244
Iowa *	1	115	—	—	2	—	1	426	5,758	4,804	2	36	54	118
Missouri	6	525	17	—	4	—	9	389	14,669	13,336	7	383	175	38
North Dakota	—	30	—	—	—	—	—	12	704	665	—	3	2	103
South Dakota	—	54	3	—	—	—	2	35	2,090	1,996	—	2	5	134
Nebraska*	—	38	—	—	—	—	—	119	3,862	4,634	—	12	10	5
Kansas	—	149	—	—	2	—	5	64	7,472	6,433	2	76	22	70
SOUTH ATLANTIC	113	5,919	10	—	52	—	412	3,913	214,491	191,104	101	7,293	6,736	375
Delaware	—	94	—	—	—	—	10	65	2,931	2,726	1	84	85	1
Maryland	20	756	1	—	8	—	48	555	23,076	16,913	7	701	663	27
District of Columbia	7	341	—	—	1	—	—	173	14,994	16,639	5	622	780	—
Virginia	13	729	4	—	3	—	135	283	19,393	18,966	4	700	750	100
West Virginia	8	283	—	—	13	—	5	48	2,484	2,798	—	17	24	31
North Carolina	16	883	3	—	3	—	109	673	29,460	27,713	22	910	610	38
South Carolina	6	535	—	—	5	—	55	256	21,519	19,772	15	750	1,079	6
Georgia	17	881	2	—	3	—	48	624	43,783	37,411	12	819	905	131
Florida	26	1,417	—	—	16	—	2	1,236	56,851	48,166	35	2,690	1,840	41
EAST SOUTH CENTRAL	50	2,472	13	2	54	1	112	1,166	70,086	63,488	14	1,197	1,273	222
Kentucky *	7	524	3	—	18	—	20	148	8,699	7,625	1	258	345	132
Tennessee	21	781	6	2	27	—	65	516	28,108	24,772	9	444	441	53
Alabama	17	745	2	—	4	—	10	349	19,233	18,040	—	239	178	34
Mississippi	5	422	2	—	5	1	17	153	14,046	13,051	4	256	309	3
WEST SOUTH CENTRAL	49	3,220	59	—	27	2	100	2,032	111,179	102,156	39	2,136	2,481	566
Arkansas	7	386	31	—	5	—	13	68	10,832	11,789	2	91	126	73
Louisiana *	5	446	3	—	9	—	1	467	22,193	21,522	8	550	755	24
Oklahoma	1	279	18	—	2	2	68	276	10,385	9,248	2	133	160	154
Texas	36	2,109	7	—	11	—	18	1,221	67,769	59,597	27	1,362	1,440	315
MOUNTAIN	25	897	13	—	18	—	7	671	32,285	26,803	19	547	565	170
Montana	—	71	—	—	—	—	1	26	1,788	1,484	1	7	5	7
Idaho	—	32	—	—	—	—	1	54	1,653	1,907	—	12	10	—
Wyoming	3	25	6	—	3	—	1	18	694	472	—	9	30	11
Colorado	13	174	—	—	—	—	1	172	8,974	7,391	4	133	190	27
New Mexico	2	181	2	—	4	—	2	79	4,939	4,738	9	89	106	77
Arizona	3	318	—	—	8	—	—	243	9,028	7,425	6	201	147	47
Utah	3	41	5	—	—	—	1	57	1,983	1,548	—	14	13	1
Nevada	1	55	—	—	3	—	—	22	3,226	1,838	—	82	64	—
PACIFIC	69	4,389	9	2	104	—	3	2,235	116,202	114,499	116	4,049	3,731	362
Washington *	3	311	—	—	13	—	1	266	11,088	11,065	—	80	137	—
Oregon	3	187	2	—	1	—	2	316	10,687	10,028	—	98	54	6
California	58	3,463	7	1	85	—	—	1,575	89,309	88,708	116	3,826	3,457	345
Alaska	—	82	—	—	2	—	—	52	2,836	2,588	—	16	16	11
Hawaii	5	346	—	1	3	—	—	26	2,282	2,110	—	29	67	—
Guam	—	30	—	—	1	—	—	—	302	403	—	5	5	—
Puerto Rico	14	503	—	—	4	—	—	73	3,070	3,889	32	826	666	50
Virgin Islands *	—	4	—	—	—	—	—	4	289	222	1	45	32	—

*Delayed reports: Tuberculosis: Upstate N.Y. 41, Iowa delete 1, Neb. delete 6, Wash. II, V.I. I
Gonorrhea: La. delete 6, V.I. 8

Syphilis: Ky. delete 1, La. delete 1, V.I. 1

Week No.
48

TABLE IV. DEATHS IN 121 UNITED STATES CITIES FOR WEEK ENDING NOVEMBER 30, 1974

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes					Pneumonia and Influenza All Ages	Area	All Causes					Pneumonia and Influenza All Ages
	All Ages	65 years and over	45-64 years	25-44 years	Under 1 year			All Ages	65 years and over	45-64 years	25-44 years	Under 1 year	
NEW ENGLAND	609	395	148	31	19	31	SOUTH ATLANTIC	1,029	586	291	85	34	29
Boston, Mass.	194	112	50	14	8	4	Atlanta, Ga.	131	71	38	14	3	2
Bridgeport, Conn.	38	25	10	—	2	2	Baltimore, Md.	227	122	68	22	5	3
Cambridge, Mass.	36	26	7	3	—	4	Charlotte, N. C.	61	29	21	5	4	—
Fall River, Mass.	19	15	4	—	—	—	Jacksonville, Fla.	72	46	14	7	4	—
Hartford, Conn.	36	26	8	1	1	—	Miami, Fla.	113	68	29	8	2	6
Lowell, Mass.	27	22	1	2	1	—	Norfolk, Va.	61	31	20	4	4	5
Lynn, Mass.	18	15	2	1	—	2	Richmond, Va.	77	33	30	7	4	1
New Bedford, Mass.	17	12	5	—	—	1	Savannah, Ga.	22	11	9	1	—	2
New Haven, Conn.	43	31	8	1	2	—	St. Petersburg, Fla. *	81	69	11	2	1	4
Providence, R. I.	48	25	18	2	3	4	Tampa, Fla.	56	38	11	3	2	3
Somerville, Mass.	5	3	1	1	—	2	Washington, D. C.	95	48	30	11	5	2
Springfield, Mass.	46	31	10	2	2	8	Wilmington, Del.	33	20	10	1	—	1
Waterbury, Conn.	26	17	6	3	—	—							
Worcester, Mass.	56	35	18	1	—	4							
MIDDLE ATLANTIC	2,720	1,742	685	144	66	94	EAST SOUTH CENTRAL	512	293	151	24	14	31
Albany, N. Y.	53	36	11	3	2	—	Birmingham, Ala.	77	41	28	2	—	1
Allentown, Pa.	20	13	5	1	1	1	Chattanooga, Tenn.	47	31	8	2	3	2
Buffalo, N. Y.	112	69	28	8	3	2	Knoxville, Tenn.	42	33	9	—	—	1
Camden, N. J.	35	25	8	1	1	—	Louisville, Ky.	74	41	19	8	2	8
Elizabeth, N. J.	20	13	4	3	—	—	Memphis, Tenn.	103	62	29	3	1	5
Erie, Pa.	32	23	6	2	—	2	Mobile, Ala.	36	16	15	1	1	3
Jersey City, N. J.	44	27	13	3	1	—	Montgomery, Ala.	28	15	9	1	1	1
Newark, N. J.	33	21	8	3	1	3	Nashville, Tenn.	105	54	34	7	6	10
New York City, N. Y. †	1,524	984	375	78	39	49	WEST SOUTH CENTRAL	846	454	238	63	47	22
Paterson, N. J.	24	14	8	1	—	2	Austin, Tex.	22	15	5	1	—	2
Philadelphia, Pa.	301	177	87	18	10	3	Baton Rouge, La.	53	22	18	6	2	2
Pittsburgh, Pa.	153	82	57	6	2	17	Corpus Christi, Tex.	27	16	5	2	1	—
Reading, Pa.	44	34	7	2	1	3	Dallas, Tex.	123	73	31	7	9	—
Rochester, N. Y.	109	76	21	4	2	3	El Paso, Tex.	29	15	8	3	2	1
Schenectady, N. Y.	24	17	3	2	—	1	Fort Worth, Tex.	90	55	20	5	4	2
Scranton, Pa.	26	18	7	1	—	—	Houston, Tex.	146	65	38	20	12	2
Syracuse, N. Y.	81	53	21	4	2	3	Little Rock, Ark.	30	15	10	—	1	2
Trenton, N. J.	34	17	11	1	1	3	New Orleans, La.	130	75	43	6	5	6
Utica, N. Y.	19	18	1	—	—	—	San Antonio, Tex.	107	59	34	5	5	4
Yonkers, N. Y.	32	25	4	3	—	2	Shreveport, La.	34	16	11	3	3	1
							Tulsa, Okla.	55	28	15	5	3	—
EAST NORTH CENTRAL	2,139	1,259	554	143	91	58	MOUNTAIN	395	220	100	28	19	11
Akron, Ohio	44	26	11	3	4	—	Albuquerque, N. Mex.	25	12	7	4	1	—
Canton, Ohio	34	23	6	3	—	3	Colorado Springs, Colo.	21	6	4	3	3	—
Chicago, Ill.	575	326	154	37	32	18	Denver, Colo.	93	53	23	6	3	2
Cincinnati, Ohio	147	93	38	8	6	3	Las Vegas, Nev.	24	13	6	3	—	1
Cleveland, Ohio	171	91	54	13	7	3	Ogden, Utah	20	14	3	3	—	5
Columbus, Ohio	140	87	33	10	2	2	Phoenix, Ariz.	111	60	33	7	4	—
Dayton, Ohio	87	48	26	10	1	—	Pueblo, Colo.	10	5	5	—	—	1
Detroit, Mich.	301	169	75	24	11	1	Salt Lake City, Utah	42	24	9	1	5	2
Evansville, Ind.	35	24	9	—	2	1	Tucson, Ariz.	49	33	10	1	3	—
Fort Wayne, Ind.	35	18	10	2	2	1							
Gary, Ind.	17	9	4	3	1	3	PACIFIC	1,450	899	361	91	44	47
Grand Rapids, Mich.	40	35	4	—	1	6	Berkeley, Calif.	14	9	4	1	—	—
Indianapolis, Ind.	136	84	30	9	7	2	Fresno, Calif.	55	35	15	2	1	1
Madison, Wis.	31	21	2	3	2	5	Glendale, Calif.	22	17	3	2	—	—
Milwaukee, Wis.	92	63	21	2	2	3	Honolulu, Hawaii	66	33	21	8	4	1
Peoria, Ill.	42	21	14	2	3	—	Long Beach, Calif.	95	57	27	5	3	1
Rockford, Ill.	23	15	7	1	—	1	Los Angeles, Calif.	402	251	84	30	17	9
South Bend, Ind.	45	19	14	9	1	3	Oakland, Calif.	52	36	10	2	2	2
Toledo, Ohio	99	61	26	3	5	2	Pasadena, Calif.	22	15	6	—	—	—
Youngstown, Ohio	45	26	16	1	2	1	Portland, Oreg.	149	89	43	6	4	12
							Sacramento, Calif.	59	41	13	3	—	3
WEST NORTH CENTRAL	711	445	178	41	23	27	San Diego, Calif.	97	54	32	5	3	—
Des Moines, Iowa	37	22	10	5	—	—	San Francisco, Calif.	182	107	54	15	2	11
Duluth, Minn.	26	17	6	1	1	2	San Jose, Calif.	36	23	7	2	2	—
Kansas City, Kans.	36	23	10	1	—	4	Seattle, Wash.	125	80	27	9	3	5
Kansas City, Mo.	120	69	32	9	6	5	Spokane, Wash.	45	33	9	1	2	1
Lincoln, Nebr.	40	24	13	1	1	6	Tacoma, Wash.	29	19	6	—	1	1
Minneapolis, Minn.	80	51	20	6	1	1							
Omaha, Nebr.	60	35	17	3	4	2							
St. Louis, Mo.	190	125	43	7	6	3							
St. Paul, Minn.	53	37	11	2	1	—							
Wichita, Kans.	69	42	16	6	3	4							
							Total	10,411	6,293	2,706	650	357	350
							Expected Number	12,558	7,546	3,334	808	407	436

†Delayed report for week ending Nov. 23, 1974

*Estimate based on average percent of divisional total

NON-CHOLERA VIBRIO DIARRHEA — Massachusetts

On November 12, 1974, 4 days after her arrival in Acapulco, Mexico, a 37-year-old Massachusetts woman developed a mild diarrheal illness. Her illness lasted 2 days and she was asymptomatic upon her arrival in the United States on November 14. On November 17, she had the onset of severe diarrhea, with up to 30 greenish, watery bowel movements a day, vomiting, and abdominal cramps. She was hospitalized that day; physical examination was normal except for tachycardia. She was treated with oral fluids and tetracycline and was asymptomatic after 3 days.

A stool specimen was obtained for culture on the day of admission. On November 21 the hospital laboratory reported the isolation of an organism with biochemical characteristics compatible with *Vibrio cholerae*. At the state reference laboratory the organism was identified as a non-cholera vibrio when it failed to agglutinate in cholera antisera. The isolate was confirmed as a non-cholera vibrio at CDC.

(Reported by Daniel Harrington, MD, Fall River Hospital, Romyne F. McKenna, Commissioner of Public Health, Fall River; George P. Waterman, MD, Assistant State Epidemiologist, and Marion Holmes, Director, Bacteriology Laboratory, Massachusetts Department of Health; Enteric Diseases Section, Epidemiologic Investigations Laboratory Branch, Bureau of Epidemiology, CDC.)

Editorial Note

This patient's most recent illness was very likely caused by a non-cholera vibrio, an organism biochemically similar to *Vibrio cholerae*, but lacking the O-subgroup 1 antigen and thus failing to agglutinate in specific antisera (1).

These organisms can produce a severe diarrheal illness indistinguishable from cholera (2) that is probably mediated by an enterotoxin very similar to that of *V. cholerae* (3).

This patient may have acquired her infection in Acapulco or Massachusetts. The extent to which this organism is present in American coastal waters is unknown. Non-cholera vibrio enteritis was recently reported in an American who had traveled to New Orleans (4).

References

1. Barua D: Laboratory Diagnosis of Cholera in Barua D and Burrows W. Cholera. Philadelphia, W. B. Saunders, 1974, p 99
2. McIntyre OR, Feeley JC, Greenough WB III, Benenson AS, Hassan SI, Saad A: Diarrhea Caused by Non-Cholera Vibrios. Am J Trop Med Hyg 14:412-418, 1965
3. Zinnaka Y, Carpenter CCJ: An Enterotoxin Produced by Noncholera Vibrios. Johns Hopkins Med J 131:403-411, 1972
4. DeGerame JH, Smith MT: Noncholera Vibrio Enteritis Contracted in the United States by an American. J Infect Dis 129:587-589, 1974

FOLLOW-UP: INTRODUCED MALARIA — California

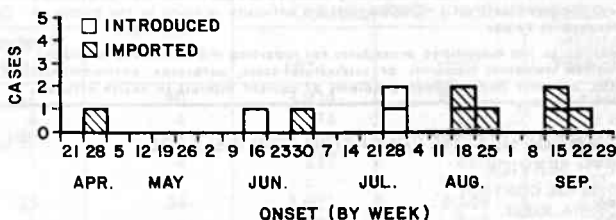
An outbreak of vivax malaria involving 5 cases was reported from California earlier this year (MMWR, Vol. 23, No. 33); because 2 of the 3 introduced* cases lived within half a mile of each other, a house-to-house, case-finding survey was conducted August 12-16. Information was obtained from 339 persons, sera from 120, and smears from 16. All persons were asked about recent febrile illness, foreign travel, malaria history, and chemoprophylaxis. Serum was obtained from anyone who had been in a malarious country in the past 3 years, who had a history of malaria, or who had had an unexplained febrile illness in the past 6 months. In addition, thick and thin smears were made from those persons with recent histories of malaria or unexplained febrile illnesses. About 1/3 of the 339 persons had been in India or Mexico within the past 3 years. No active, unreported cases of malaria were discovered in the survey.

In the 6 weeks following the survey, 6 additional cases of vivax malaria were reported from this area; all were imported.** Three of the persons were members of a family that emigrated from India and arrived in California July 7, 1974.

Of the total 11 cases detected during this outbreak, 3 were introduced (Cases 2, 4, and 5) and 8 were imported from India (Figure 1). All cases were smear diagnosed.

(Reported by Johan Lohne, MD, Lester Fuller, MD, and R. E. Gleffe, MD, Private Physicians, Sutter County; Gary Jenkins, MD, Private Physician, Butte County; Thomas Leavenworth, MD, Director, Sutter County General Hospital; Eugene E. Kauffman, Manager, Sutter-Yuba Mosquito Abatement District; William Hazeltine, PhD, Manager, Butte County Mosquito Abatement District; Rae C. Lindsay, MD, Health Officer, Dorothy Aaker, Nursing Supervisor, Sutter-Yuba Health

Figure 1
MALARIA CASES, BY DATE OF ONSET,
SUTTER AND YUBA COUNTIES, CALIFORNIA
APRIL 28-SEPTEMBER 28, 1974



Department; Ralph T. Erlingheuser, MD, Health Officer, Judith Delgado, Public Health Nursing Supervisor, Butte County Health Department; Lynda Bradford, Supervisor, Serology Section, Catherine Powers, Senior Microbiologist, Microbial Diseases Laboratory, Mitchell Singal, MD, Medical Epidemiologist, and James Chin, MD, Chief, Infectious Disease Section, California Department of Health; and 2 EIS Officers.)

Editorial Note

This outbreak is of interest in that while there were at least 2 generations of introduced cases, the total number of epidemiologically related cases was small. It is possible that the family emigrating from India could have acquired their disease after arriving in California, but it is more likely that they represent imported cases of *P. vivax* malaria. The large influx of Mexican migrant workers, many from malaria endemic areas, suggests a potential increase in the number of parasitemic individuals. Because many field laborers tended not to seek medical attention for mild or moderate illness, there may also have been some undetected cases. In addition, prior to the publicity, physicians may not have considered the diagnosis in cases with mild symptoms or where there was a language barrier.

*Malaria acquired by mosquito transmission from an imported case in an area where malaria is not a regular occurrence.

**Malaria acquired outside of the United States.

MULTIPLE ANTIBIOTIC RESISTANCE IN *SHIGELLA DYSENTERIAE*-1 FROM INDIA - California

On November 4, 1974, 4 days before departing India, a 74-year-old American woman developed profuse watery diarrhea and abdominal cramps. On her return flight to the United States, the cramps became severe and her diarrhea became bloody. A stool culture obtained upon her arrival in Los Angeles grew *Shigella dysenteriae*-1 and *Shigella flexneri*-1. Both isolates were resistant to tetracycline, sulfathiazole, streptomycin, and chloramphenicol; the *S. flexneri* isolate was also resistant to ampicillin and carbenicillin. The patient was treated with ampicillin and cephalixin and after 10 days of therapy was asymptomatic.

She had been in India for 1 month and had been well until the day after she drank untreated water in a remote area 500 miles from Bombay.

(Reported by Pamela M. Day, MD, Thomas Laskaris, PhD, Chief of Microbiology, Glendale Adventist Medical Center, Glendale, California; Ralph R. Sachs, MD, Deputy Director, Community Health Services, Ichiro Kamei, MD, Chief, Acute Communicable Disease Control Division, Community Health Services, Los Angeles County; James Chin, MD, State Epidemiologist, California State Department of Health, Berkeley, California.)

Editorial Note

The resistance of *S. dysenteriae*-1 to tetracycline, sulfathiazole, streptomycin, and chloramphenicol is carried on an R-factor. Through 1972 this pattern of resistance had been reported only in *S. dysenteriae*-1 strains associated with the Central American pandemic of 1969 to 1971 (1). Beginning in 1973, however, the pattern has appeared in many isolates from Bangladesh (2).

In addition to *S. dysenteriae*-1 and *S. flexneri*-1, salmonella C-1 sensitive to all antibiotics tested was isolated from a subsequent stool culture of the patient.

References

1. Weissman JB, Marton KI, Lewis JN, Friedmann CTH, Gangarosa EJ: Impact in United States of the Shiga Dysentery Pandemic of Central America and Mexico. A review of surveillance data through 1972. *J Infect Dis* 129: 218-223, 1974
2. Kahn M, Rahaman MM, Aziz KMS, and Islam S: Epidemiologic Investigation of an Outbreak of Shiga Bacillus Dysentery in an Island Population. Cholera Research Laboratory, Dacca, Bangladesh. 1974 (Unpublished report)

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The data in this report are provisional, based on weekly telegraphs to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

In addition to the established procedures for reporting morbidity and mortality, the editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials.

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